REMARKS

Accompanying this substitute amendment is a terminal disclaimer in respect of application claims 64-67, 69-73, 75-77, 79-84, 86-90, 92-101, 103, 104, 106-111, 113-117, 119-122, 124 and 126, to the extent that such claims are in any patent that issues from this application and also to the extent that such claims would extend beyond the expiration date of prior Patent No. 5,436,030. It is submitted that this terminal disclaimer obviates the double patenting rejections contained in the August 30, 2005 Office Action.

This amendment corrects the status identifiers for each of claims 67 and 101, in view of which it is submitted that this amendment is compliant. Accordingly, from the examiner's comments in the Advisory Action, it is understood that the objection to claim 110 as described in paragraph 7 only of the Final Rejection, the rejection of claims 68, 74, 78, 85, 91 102, 112, 118, 123 and 125 as described in paragraph 9 only of the Final Rejection, and the rejection of claim 75 as described in paragraph 11 only of the Final Action, have been overcome and that the objection and rejections will be withdrawn.

That leaves claims 64-66, 75, 76 and 80, the 35 USC 102 rejection of which over Isayama et al. 4, 299,188 has been continued. Applicant reasserts that these claims are allowable, and that the term "under pressure", as used in these claims, can only be properly interpreted to mean at a pressure greater than atmospheric pressure, and that to broadly interpret the term as including atmospheric pressure is incorrect and contradictory to the teachings of the specification.

This application is a continuation of application serial No. 09/953,724, now patent 6,592,669, and incorporates the disclosure of said patent. Reference is therefore made to that patent for what it teaches about the meaning of the term "under pressure" as used in the claims, since in interpreting the claims during prosecution, a term may be given its broadest reasonable interpretation, provided the interpretation is consistent with the specification.

Note the recitation at column 8, lines 33-37, which states:

> In addition, coating liquid is introduced under pressure into and onto the fluid flow path in order that the velocity flow of the coating liquid will be sufficiently fast to generate sufficient centrifugal force to properly practice the invention. (emphasis added)

If it were sufficient for coating to be introduced into and onto the fluid flow path at atmospheric pressure, there would be no reason to provide in the specification the teaching that it is introduced under pressure, so that its velocity along the curved surface will be fast enough to generate sufficient centrifugal force to implement the invention. One skilled in the paper coating art would know that the invention is practiced in an environment at atmospheric pressure. One skilled in the paper coating art would therefore also understand that the "under pressure" teaching can only reasonably be interpreted to mean at some pressure greater than that of the surrounding ambient, since otherwise there would be no reason to include the teaching.

Attention is invited to the paper coating apparatus in Figs. 4 and 7 of the drawings, which show that coating liquid introduced from the lower chamber, into and

onto the flow path and onto the concave curved surface, flows upwardly along the flow path and curved surface and is projected, after leaving the curved surface, upwardly toward and against the web. For coating to flow upwardly along the flow path and concave curved surface and then be projected upwardly for impingement against the web, it is necessary that the coating be introduced into the flow path and onto the curved surface at a pressure in excess of atmospheric (a pressure in excess of atmospheric is inherent if only because of the pressure exerted by the overlying column of coating liquid on that being introduced onto the curved surface). If the coating were at a pressure no greater than atmospheric when introduced onto the concave curved surface, it would not flow upwardly and it certainly would not continue upwardly after leaving the surface. Admittedly, applicant has not stated in the specification that "under pressure" means at a pressure "greater than atmospheric pressure", but it inherently follows from other teachings of the specification and drawings that it must. To interpret the term otherwise is contradictory to and disregards applicant's teachings.

Attention also is invited to column 4, lines 44-51 of patent 6,592,669, which read:

> The front and rear walls and the plate form a chamber 66 therewithin, into which liquid coating material is delivered under pressure via a coating liquid distribution pipe 68 that extends longitudinally through the chamber and has a plurality of coating outlet openings 69 spaced longitudinally therealong. (emphasis added)

and to column 5, lines 44-49, which recite:

> The outlet allows recirculation of a small portion of the coating liquid supplied to the distribution pipe, in order to remove accumulated air from the top of the distribution pipe and enhance a

> uniform pressure of coating liquid throughout the chamber 66 for uniform application of coating onto the moving web. (emphasis added)

The specification teaches that coating liquid is introduced into the chamber under pressure, for pressure delivery through the flow path. A pressure gradient therefore exists in the column of coating delivered from the chamber and extending between the chamber and some point beyond the concave curved surface where the coating is exposed to ambient. Although the pressure in the column of coating decreases with an increasing height of the column above the chamber, the pressure along the concave curved surface nevertheless remains in excess of atmospheric (again, if only due to the overlying column of coating), and does not decrease to atmospheric at least until the upper end of the column of coating is exposed to ambient. Consequently, the pressure of coating liquid introduced onto the concave curved surface is inherently above atmospheric pressure.

In other words, coating liquid is pumped into the underlying chamber at a pressure greater than atmospheric. The pressure of coating in the chamber then delivers the coating in a column that flows upwardly into and through the flow path and onto and along the concave curved surface. At some point vertically above the introduction of coating onto the concave curved surface, pressure in the upper end of the column of coating, because of exposure to ambient, is reduced to, or to about, atmospheric pressure. That point is vertically above the location where coating is introduced onto the concave curved surface, so when it is said that coating liquid is

introduced "under pressure" onto the concave curved surface, it can only be understood to mean that coating is introduced onto the surface at a pressure in excess of atmospheric.

In summary, it is respectfully submitted that interpretation of the term "under pressure", as used in claims 64-66, 75, 76 and 80, must be in accord with, not contradictory to, the clear teachings of the specification. The term must therefore be interpreted as meaning a pressure that follows from the teachings of the specification, which pressure must inherently be greater than atmospheric. Such a pressure is not taught by Isayama et al. 4,299,188, and it therefore is submitted that independent claim 64 and its dependent claims 65, 66, 75, 76 and 80 are allowable over Isayama et al.

Accordingly, favorable reconsideration and early passage of the application to allowance are respectfully requested.

Respectfully submitted,

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